

Governor's Advisory Council on Aviation

Final Report

January 31, 2007

Executive Order 2004-22



Governor's Advisory Council on Aviation

Bonnie Allin, Chairman

Richard "Dick" Bethurem

Michael Covalt

Barbara Harper

Stacy Howard

C. A. Howlett

David Kreitor

Robert Littlefield

Ronnie Lopez

John Mills

Victor Mendez

CONTENTS

<i>Executive Summary.....</i>	<i>3</i>
<i>Introduction.....</i>	<i>9</i>
<i>Land Use Committee Chapter.....</i>	<i>13</i>
<i>Airport Capacity Committee Chapter.....</i>	<i>21</i>
<i>Finance Committee Chapter.....</i>	<i>31</i>
<i>Conclusion and Acknowledgements.....</i>	<i>36</i>

<i>Appendix</i>	<i>Documents</i>	<i>Date</i>
<i>A.</i>	<i>Governor’s Advisory Council on Aviation Agenda Meeting Minutes</i>	<i>1/31/05</i>
<i>B.</i>	<i>Capacity Subcommittee Agenda Maricopa Association of Governments Presentation Pima Association of Governments Presentation</i>	<i>4/4/05</i>
<i>C.</i>	<i>Land Use Subcommittee Agenda City of Buckeye Presentation Tucson Airport Authority Presentation</i>	<i>4/13/05</i>
<i>D.</i>	<i>Governor’s Advisory Council on Aviation Agenda Meeting Minutes ADOT-Aeronautics Federal Funds Information</i>	<i>4/27/05</i>
<i>E.</i>	<i>Land Use Subcommittee Agenda ADOT-Aeronautics Land Use Compatibility Presentation</i>	<i>6/20/05</i>
<i>F.</i>	<i>Capacity Subcommittee Agenda U.S. Air Force Presentation</i>	<i>7/19/05</i>

- G. *Governor's Advisory Council on Aviation Agenda 7/19/05
Meeting Minutes*

- H. *Governor's Advisory Council on Aviation Agenda 10/12/05
Meeting Minutes*

- I. *Governor's Advisory Council on Aviation Agenda 1/18/06
Meeting Minutes
Preliminary Report
Capacity Subcommittee's Airport Survey*

- J. *Land Use Subcommittee Agenda 4/4/06
ADOT-Aeronautics Grant Assurances*

- K. *Governor's Advisory Council on Aviation Agenda 6/28/06
Meeting Minutes
Land Use Subcommittee Report
ADOT-Aeronautics State Aviation Fund Presentation
ADOT-Aeronautics Review of AzAA Proposals*

- L. *Finance Advisory Subcommittee Agenda 9/20/06
ADOT-Aeronautics Airport Operations Comparisons*

- M. *Governor's Advisory Council on Aviation Agenda 9/20/06
Meeting Minutes*

- N. *Finance Advisory Subcommittee Agenda 10/25/06*

- O. *Capacity Subcommittee Agenda 10/25/06
City of Phoenix Fire Department ARFF Presentation*

- P. *Finance Advisory Subcommittee Agenda 1/12/07
Arizona Airports Association Letter, 1/11/07
Arizona Airports Association Recommendations*

- Q. *Governor's Advisory Council on Aviation Agenda 1/12/07
Meeting Minutes*

- R. *Governor's Advisory Council on Aviation Agenda 1/23/07*

January 31, 2007

EXECUTIVE SUMMARY OF THE GOVERNOR'S ADVISORY COUNCIL ON AVIATION FINAL REPORT

Economic Impact

Aviation in Arizona, commercial, general, and military, including aviation manufacturing and related industries, is a significant contributor to the State's economy. For example, the three City of Phoenix-owned airports alone have an annual economic impact exceeding \$26.2 billion, which is equivalent to \$72 million per day. Aviation's total civilian economic impact on Arizona's economy in 2002 was \$37 billion. It supported over 467,855 jobs with a payroll of \$14.6 billion. The impact from Arizona's military aviation facilities was \$5.7 billion and it supported 83,506 jobs with a payroll of \$2.4 billion. In the last four years, all sectors of aviation in Arizona have grown significantly, rebounding from September 11, 2001 much faster than the majority of the country.

Since 2002, at Tucson International and Phoenix Sky Harbor Airports alone, commercial passenger levels have increased 21.3% and 16%, respectively. Demand on the Arizona aviation system of airports will double over the next 20 years, and the infrastructure of the system must grow to provide the access for our citizens and visitors. It must protect and grow compatibly with surrounding communities to ensure the State's ability to grow.

Background

Governor Janet Napolitano established the Governor's Advisory Council on Aviation (ACA) through Executive Order 2004-22 on September 21, 2004. The ACA was tasked to study and issue consensus findings and recommendations that specifically addressed the following issues:

- a. Airspace utilization and airport capacity
- b. Land use compatibility
- c. Federal funding for aviation in Arizona
- d. Criteria for evaluating aviation facility and system needs
- e. Future aviation needs assessments and funding strategies

The five issues were combined into three categories for further study; Land Use, Capacity and Funding Needs. The ACA met 19 times in various capacities beginning January 31, 2005 through January 31, 2007 in locations through out the State (Phoenix, Tucson, Flagstaff and Yuma). In those meetings the ACA consulted with, or took testimony from, as many aviation interests as possible. Those interests consisted of stakeholders in commercial, military and general aviation, including representatives from the Federal Aviation Administration, Arizona Department of Transportation – Aeronautics Division, Maricopa Association of Governments, Pima County Association of Governments, Arizona State Land Department, Arizona Department of Real Estate, Southern Arizona

Leadership Council, airport operators, Governor's Office on the Governor's Growth Initiative, ADOT's Multi-modal Transportation Study and Arizona Airports Association (AzAA), Arizona Pilots Association, Aircraft Owners and Pilots Association, and the Aviation Safety Advisory Group of Arizona. The meetings, consultations and testimonies contributed to ensure all necessary information could be gathered, the issues identified and thoroughly studied, and meaningful and achievable recommendations developed.

The attached Report to the Governor includes background, discussion, and recommendations respectfully submitted for consideration. A summary of the recommendations include:

Growing Smarter

The Growing Smarter Acts

The Governor's Growth Initiative, including Growing Smarter and Growing Smarter Plus, creates a valuable framework for Arizona communities by mandating local jurisdictions to provide greater efforts as to how and where growth will occur and how it will be financed. Guiding principles direct state and local decision makers to embrace their responsibility, transcend immediate interests, and seek the broadest possible community benefit. The Growing Smarter Acts encourage regional partnerships and collaboration to form a consensus community vision and promote the use of state laws, procedures, expertise, resources and actions to reinforce local planning efforts. The Guiding Principles and recommended partnerships in each of the six categories set forth by the Growing Smarter Oversight Council; responsibility and accountability, preservation of community character, stewardship, opportunity, and infrastructure, should be applied to aviation planning.

- Close coordination must exist between the ADOT-Aeronautics Division, airport operators, State Land Department, and State Real Estate Department to map Airport Influence Areas, Airport Noise Contours, Airport Hazard Districts, and Traffic Pattern Airspace requirements for each public use airport, and to make those maps publicly and readily available to developers, airport sponsors, and planners.
- Based upon the Principles of the Growing Smarter Oversight Council, the State of Arizona should provide templates and structures for regional partnerships and inter-governmental coordination to facilitate collaborative efforts among local authorities for consensus land use planning in the vicinity of airports.

Land Use

Aviation legislation to help achieve state oversight of compatible land use planning near airports is recommended by this council to strengthen the State's commitment to aviation

planning, preservation and development. Good legislation that could serve as a model for Arizona has been crafted by several states.

- Legislation should:
 - ❑ Empower the airport owner to protect the airport from non-compatible encroachment and adversarial confrontation with its community;
 - ❑ Empower the State of Arizona and its citizens to protect our significant investment in system airports and maximize the airport's economic return;
 - ❑ Protect airports' ability to develop and operate in the safest most efficient environment;
- Publicly owned and operated airports and local zoning officials should pursue adoption of compatible land use code (Re: airport environs zones), which define compatible land uses in the vicinity of an airport. This should include definitions of prohibited uses within the vicinity of an airport and define Airport Hazard District, Noise Contours, and Public Disclosure Zones. When applicable, ADOT-Aeronautics should provide planning assistance;
- ADOT-Aeronautics should receive notification of local zoning changes and requests for permits for tall structures within Airport Influence Areas, Traffic Pattern Airspace, Airport Noise Contours, Airport Hazard Districts, and Overlay Districts for State system airports when local airports are unable to manage such notification. Aeronautics may review and provide comment on these changes and permits in coordination with the airport. Notification requirements should be made part of the State grant assurances for receiving state aviation funding;
- All existing and future airport studies and master plans funded through federal and state grants should be fully integrated into each community's comprehensive general plan to create certainty about airport land use requirements for land owners, developers and prospective purchasers; and
- ADOT Aeronautics will provide assistance to help bridge the gap between airport master planning and compatible land use planning for public use airports.

Capacity

Legislative action is recommended to meet the growth demands on the aviation industry in the future. The airport community must work together with the FAA and ADOT-Aeronautics to fund airport construction and growth in Arizona. The following recommendations to strategically plan for the future will allow Arizona's aviation system to meet the long-term transportation needs of the communities while protecting the military's need for Arizona airspace:

- Fund and implement capacity projects at twenty-five airports in Arizona;
- Change Grand Canyon National Park Airport's funding approach from the State of Arizona's Aviation Fund to an enterprise fund. Rates and charges should be adjusted appropriately to allow for revenues to cover sufficient staffing levels and capital improvement program;
- Protect the military's need for Arizona airspace;
- Develop an Outlying Airport System Plan for small airports in outlying communities;
- Explore the possibility of funding a mobile statewide ARFF training unit to provide important fire safety training for communities who are unable to afford national training;
- Increase the annual Pavement Maintenance Management Program funding from \$3 million to \$4 million and increase the scope of projects covered;
- Establish an Adopt-An-Airport program; and
- Create a statewide program for the inspection and maintenance of airports that have automated weather observation systems (AWOS).

Funding

Legislative action is recommended to provide dedicated funding to develop the rapidly growing aviation infrastructure. The aviation community continues to be concerned that sufficient funds are not available to maintain and improve the state's network of airports. Critical projects that are under-funded due to limitations of available dollars will ultimately become a financial burden to airports, their communities and their tenants. If adequate funding is not provided to ensure the State's aviation system keeps up with the rapid growth of Arizona's population and aviation community, it will have a significant adverse effect on the economic prosperity of the State. The ACA has worked closely with the State's aviation community to develop specific recommendations to the Governor to maximize the effectiveness of the limited available funding. To effect that maximization, the ACA recognizes and recommends the following:

- AIP funding is a critical element in Arizona's aviation future and every effort should be made to stem the erosion of AIP funding by FAA operating expenses. The ACA urges Arizona's Congressional delegation, the United States Department of Transportation, the Federal Aviation Administration, the Arizona Department of Transportation, and the Arizona Department of Transportation Aeronautics Division to make every effort to protect the integrity of the Aviation Trust Fund and its' AIP funding for airports;
- Arizona should strengthen the commitment to its aviation system through modifications in legislation to constitutionally or statutorily protect the State Aviation Fund and eliminate the potential for future diversion of aviation funding sources from the State's Aviation Fund to non-aviation purposes;

- All revenues collected from the aviation sector should be dedicated for aviation purposes;
- Request the Legislature appropriate to the Aviation Fund the full amount of the anticipated Fund revenues each year and re-appropriate to the Fund any unspent funds from the previous year;
- Development of an enhanced Joint Planning Conference process by the ADOT-Aeronautics Division, the FAA and airports to maximize the use of available federal and state grant funds toward the airport's improvement priorities. Enhancing communication and synchronizing the timing of the FAA and ADOT planning processes, along with greater input from airports on their most critical priorities, will ensure the most realistic and achievable Airport Capital Improvement Program (ACIP) to fund aviation infrastructure priorities;
- ADOT-Aeronautics should work with the State Financial Division to establish an accounting system similar to the State Highway Fund wherein obligated and encumbered funds are "deducted" from the available balance of the Fund. This system would show the true status of the Aviation Fund so that the Legislative body can see the actual remaining fund balance after encumbrances and obligations are removed, rather than the misleading fund balance as a whole;
- ADOT-Aeronautics Division should continue to issue design-only grants for airports, which would expedite the process for getting projects designed and ready to go based-on-bids. This would help increase the amount of federal dollars coming into the state as the FAA's performance is based on granting dollars based-on-bids;
- ADOT-Aeronautics Division should look at ways to increase appropriations from the State Aviation Fund for use in grant and loan funding programs for airports;
- Amend State Aviation Fund statutory language limiting the amount of grant funds for an airport from ten percent of the total aviation fund to ten percent of the fund forecast annual revenue;
- ADOT-Aeronautics Division should review administrative directives and develop criteria with stakeholders to address the allocation of funds and the current requirements for an airport's matching funds; and
- Grand Canyon National Park Airport should be operated as an enterprise fund of the State of Arizona. It is the gateway airport to one of Arizona's, and the indeed the world's, most unique treasures, Grand Canyon National Park. Financial management as an enterprise fund would permit the airport to be managed and operated using exclusively airport-generated funds. Airport rates and charges would be negotiated with tenants at levels that permit much needed capital improvements and long range set asides, as well as staffing, to showcase the airport and enhance its economic contribution to the State.

Conclusion

It is imperative for Arizona's aviation future that the challenges be addressed and solutions implemented. The alternative of "not" strategically planning for compatibility and compliance, developing airport capacity, and appropriately funding the aviation system will not stop growth in the future, but rather, the challenges will multiply, investments depreciate, and negative impacts compound our aviation communities. We appreciate the opportunity to have worked with the multitude of aviation interests and stakeholders over the two-year time frame to have developed consensus findings and recommendations to improve aviation in Arizona. The report is being presented to the State Transportation Board to provide background and recommendations to the Board as it deliberates on aviation related projects that affect Arizona's future.

The Governor's Advisory Council on Aviation wishes to express our appreciation to the Governor for the privilege of providing input and recommendations to the Governor, the President of the Senate, and the Speaker of the House.

Respectfully submitted,
Governor's Advisory Council on Aviation



Bonnie Allin, Chairman
Richard "Dick" Bethurem
Michael Covalt
Barbara Harper
Stacy Howard

C.A. Howlett
David Kreitor
Robert Littlefield
Ronnie Lopez
John Mills
Victor Mendez

January 31, 2007

Governor's Advisory Council on Aviation

Introduction

The State's aviation system, commercial, general, and military, has a multi-billion dollar impact to the State's economy. The three City of Phoenix-owned airports alone have an annual economic impact exceeding \$26.2 billion, which is equivalent to \$72 million per day. Aviation's total civilian economic impact on Arizona's economy in 2002 was \$37 billion. It supported over 467,855 jobs with a payroll of \$14.6 billion. The impact from Arizona's military aviation facilities was \$5.7 billion and it supported 83,506 jobs with a payroll of \$2.4 billion. In the last four years, all sectors of aviation in Arizona have grown significantly, rebounding from September 11, 2001 much faster than the majority of the country.

Air travelers and tourists spent \$5.9 billion in Arizona in 2002, creating over 121,000 jobs in lodging, retailing, and the service sector. It is anticipated that over the next 20 years the total number of passengers boarding at all twelve commercial service airports in the State, including the three largest airports, Sky Harbor International, Tucson International, and the Grand Canyon National Park Airport, will nearly double by the year 2025, and the total number of based aircraft in Arizona will increase by about one-third. Since 2002, at Tucson International and Phoenix Sky Harbor Airports alone, commercial passenger levels have increased 21.3% and 16%, respectively.

The Governor's Advisory Council on Aviation (ACA) was established by Executive Order 2004-22 and signed by Governor Janet Napolitano in September of 2004. (See attached Appendix). ACA's primary role is to develop strategies for improving the efficiency of Arizona's aviation system, to enhance land use and aviation planning, and to improve the working relationship and communication between state and local aviation entities and federal agencies that have the primary responsibility for regulating aviation in the State.

The State's system of airports is an integral part of the transportation infrastructure that has been invested in heavily by the State and Federal Governments as well as the communities operating the aviation facilities. The airports, including commercial, general aviation and military, are irreplaceable assets.

Growth and Planning

Consistent with the Governor's Growth Initiative to develop strategies to enhance the State's ability to guide growth effectively for the benefits of all Arizonans, the ACA has studied and developed recommendations to be referred to the Governor's Growth Cabinet. We offer recommendations to help open the dialogue on aviation issues for members of the Cabinet.

Aviation Growth and Land Use Planning

There are formidable challenges facing growth and planning for Arizona airports. The major challenges include the coordination between state, local, and federal agencies for distribution of resources and planning guidance; the cross jurisdictional cooperation during planning and zoning that adequately protects the unique character and needs of airports; and the lack of a broad State policy to protect airports from incompatible encroachment.

A number of tools exist to help protect airports, developers, and the general public from the discord that results from incompatible encroachment. Most important are advance planning and zoning, educational measures including airport disclosure and easements, and noise mitigation. Incorporation of protections for airport environs in respective Comprehensive General Plans is recommended statewide.

Advance planning and zoning through the creation of overlay districts, cooperative agreements across jurisdictional boundaries, enforcement of height restrictions, and other means is by far the most efficient, most effective, and least expensive tool available.

Public disclosure about the potential for aircraft noise and overflight, and the use of aviation easements are important second tier tools for airport compatibility, efficiency and capacity.

Noise mitigation is the least desirable and most expensive solution. The cost of noise attenuation or acquisition of property adjacent to an airport can be prohibitive, especially for rural airports. Similarly, there are limited Federal and State resources available to address noise mitigation and abatement needs. This solution also creates the highest probability for litigation.

Airport Capacity

The ACA worked with stakeholders and surveyed airport operators to examine the existing assets and to review the future needs to ensure that aviation facilities are effectively planning for the necessary infrastructure growth. Recommendations are divided into seven major categories: Pima Association of Governments (PAG) Regional Aviation System Plan (RASP); Maricopa Association of Governments (MAG) RASP; Grand Canyon National Park Airport; Military concerns; Outlying Airport System Plan; Mobile Aircraft Rescue Fire Fighting Training; and General. Timely planning and

construction of the airport's capital programs is essential to provide adequate facilities for the expected rapid growth of the State.

Aviation Funding

Critical to the success of meeting the Growth Initiative for Aviation, is the ability to fund necessary improvements. The ACA reviewed the existing funding sources and examined potential additional sources. A significant amount of the capital funding available to airports is from Federal and State grants.

Federal funding for airport projects comes primarily from Airport Improvement Program (AIP) grants that provide the largest amount of money annually to both primary commercial and general aviation/reliever airports. AIP grants and the FAA are currently funded through appropriations from the Aviation and Airway Trust Fund (AATF) along with some contributions from the General Fund. Fuel taxes, airline ticket taxes, and a variety of excise taxes are collected and deposited into the Aviation Trust Fund. A portion of the fund is appropriated by Congress for grant distribution to airports for planning and infrastructure. Airport projects must meet eligibility and priority ranking requirements. Authorizations for FAA, the Trust fund and excise taxes expire September 30, 2007.

The State of Arizona also has a program for collecting aviation fuel tax, aircraft registration fees and in-lieu of tax, and flight property tax. These dollars are deposited into the State Aviation Fund, programmed and administered by ADOT staff, and are intended to supplement federal allocations. Coordination between Federal and State funding programs to assure the airports' most urgent and important needs are met first is a significant challenge under the current system. Recommendations are included to enhance the joint planning process between FAA, ADOT-Aeronautics and airports. The ACA is also very concerned that sufficient funds are not available to maintain and improve the State's aviation system of airports.

Grand Canyon National Park Airport is the State's gateway to its premier visitor attraction, and is Arizona's only state owned and operated airport. The Grand Canyon Airport merits special consideration. Current regulatory restrictions for funding and managing capital improvements at Grand Canyon National Park Airport have created a lack of the most basic airport facilities, such as adequate restrooms and aircraft tiedowns. This creates an inferior "first impression" by visitors, and reluctance by Arizona pilots to use the airport for overnight stays. Under current management and funding regulations and restrictions, improvements on the airport are extraordinarily difficult to achieve. A recommendation to permit Grand Canyon to operate as an Enterprise Fund is included in the report.

Land use, airspace capacity and financial planning for Arizona's aviation growth should be a part of a legislated process that would establish planning requirements between aviation and other local and state agencies enforcing standards for height restrictions, noise and safety zoning, and defined policies and procedures for all agencies to follow.

*Year Two Report
Governor's Advisory Council On Aviation*

Land Use Committee



Land Use Planning

If anything was learned during the ACA process it is that with rare exception, a substantial disconnect exists between airport planning and general planning in communities with airports.

There are a number of unique characteristics about airports when compared to other public utilities and services that can create misunderstandings and adversarial relationships with surrounding communities. Airports possess land and airspace requirements that reach far beyond airport property lines, frequently crossing over political boundaries. Airports are irreplaceable assets. Once located far outside populated areas, population growth creates demand for properties located closer and closer to airport boundaries, and the process of obtaining consensus planning among all of the adjoining political subdivisions is a challenge. Urban growth creates a competing demand for both increased capacity to accommodate the changing needs of airport tenants and users, and operational constraints desired by airport neighbors to reduce airport noise.

In response to pressures from real estate developers and land owners, comprehensive land use planning and zoning, airport overlay and planning districts are frequently undone and eroded by the very elected bodies that created them, especially in rapidly growing communities.

Limited tools and resources are available to aid publicly owned airports in providing protection and real estate disclosure for their airports.

Federal Aviation Administration

The Federal Aviation Administration (FAA) has developed land use planning guidelines and initiatives to help inform communities about the types of land use that is and is not compatible with airports. They include an internet website that acts as an information clearing house for compatible land use planning information such as FAA orders, advisory circulars, reports, studies and access to resources; a package of land use planning information for use by FAA regional officials and national planning organizations, primarily at local meetings; and guidance on environmental impact analyses. FAA grants are available under FAA Part 150 Noise and Master Plan study processes to provide assistance in determining land use protection requirements for both present and future airport operations. But all of this guidance is advisory in nature and depends upon local authority for implementation.

While the Federal Aviation Administration has preemptive authority over the National Airspace System, it is up to local authority to preserve obstruction free zones for the airspace within and beyond the airport boundaries. The FAA publishes height and distance requirements in FAA Part 77 regulations. The Part 77 Airspace Obstruction Evaluation program permits FAA to object to tall structures within an area known as

Airport Hazard Districts in the vicinity of airports, but the airport bears the burden for providing airspace protection.

Grant assurances, signed by airport sponsors when accepting federal grant monies for airport improvement projects, require airports to use their police power to preserve compatible land use. Civil penalties may apply if non-compliance results in unsafe conditions. FAA's Washington, D.C. office handles all grant enforcement and must provide extensive due process, making enforcement very rare. Sanctions are not generally imposed and there is no template for repaying grants for communities that ignore planning assurances. If states want to be more proactive, FAA is of no help.

United States Military

Arizona is a leader for legislatively protecting military operations throughout the State. Because of aggressive, tough, hard decisions by state, county and local governments, the military's ability to continue to conduct its training protected from encroachment has been significantly improved. While it remains a concern, incompatible growth surrounding the major installations in Arizona appears to be controlled. In fact, the guidelines used to protect military flight operations from incompatible land use could be incorporated into land use plans surrounding civilian airports as well. The Arizona Revised Statutes (A.R.S.) incorporates tables, as well as compatibility standards of compatible land-uses surrounding military installations which might serve as an example for all airfields, military and civilian alike. On the other hand, dissimilar compatibility standards for military and civilian airfields would most likely cause confusion and possible statutory conflicts. A "Proactive Vigilance" to protect military installations should be a policy of Arizona governments at all levels.

State of Arizona

The Arizona Department of Transportation-Aeronautics Division also publishes land use planning guidelines and recommendations for airports. Like the FAA, State guidance is advisory only and depends upon local authority for implementation. State Laws for civilian airports permit, but do not always require, real estate disclosure for properties underlying Airport Influence Areas, and the criteria and resources for developing disclosure maps vary. There is no consistent map product or reporting obligation for all public use airports.

The Aeronautics Division programs grant dollars to match Federal funds for Airport Master Plans and FAA Part 150 Noise Studies; however, there is limited involvement by State Aeronautics in local land use planning processes. These expensive, time consuming studies often become stand alone projects and are never fully integrated into city and county land use plans. At this time, the Aeronautics Division does not have the capability to actively engage in local land use planning efforts, or create airport influence disclosure maps and Part 77 Airport Hazard District maps. Lack of good compatible land use planning creates demand upon the State Aviation Fund for mitigation and land acquisition dollars.

State Real Estate Department

There are 71,000 real estate agents in Arizona. Disclosure forms completed by sellers require disclosure for properties in the vicinity of an airport, but “vicinity” is not defined and agents cannot force buyers to read public reports. While the State Real Estate Department is responsible for providing maps to the public, it has no mapping capability. It relies on the State Land Department, real estate developers, counties, cities and towns to provide them. Only a portion of airport sponsors provided maps to the department and many maps are not usable, especially those for military training routes. Current disclosure statutes are not being satisfied.

State Land Department

Large tracts of state owned lands are situated near publicly owned airports, and many acres of state lands are leased to public and private airport operators. No broad policy exists related to zoning on behalf of airport considerations. There is no map or other planning document within the department that depicts airports in the vicinity of state land. While the department is required to coordinate with local authorities in their planning and zoning process, they depend upon airport sponsors to notify them of land use planning efforts involving state land. When the decision is made to sell land, the Department contacts political subdivisions in which the land exists, but generally, there is no effort to notify adjacent subdivisions or airport owners except on a case by case basis. Unless a political subdivision or airport authority has cultivated a relationship with the Department, it is likely they are unaware of the Department’s conceptual plans for state owned lands near their airport. The State Land Department is not always invited into the airport planning process even when state lands are part of, or adjacent to, the airport. In addition, the Department prefers working with comprehensive general plans over airport proximity plans.

Because of the Department’s fiduciary obligation to market state land for the highest dollar, the Department’s interests frequently conflict with publicly owned airports’ need to preserve obstruction free zones and compatible land use. Lands surrounding military facilities are treated differently. Military facilities are always asked for input because the federal government is the only entity capable of condemning state owned land.

Airport Sponsors – Counties, Cities and Towns

All responsibility for compatible land use planning in the vicinity of an airport rests with local authority. Pressure from real estate developers to create planned residential communities near previously remote airports is intense, and although residential use is incompatible, the infrastructure provided by these developments brings water, sewer and electricity closer to the airport. This infrastructure is sorely needed by rural airports and not eligible under traditional federal and state airport funding programs. The temptation to permit residential encroachment on rural airports is often irresistible. Good land use

planning may be undone by the same elected and appointed officials who created it, often against planning and zoning department recommendations.

Existing tools, such as real estate disclosure agreements, published maps, aviation easements, and neighborhood signs are under utilized, frequently ineffective and often apply only to new subdivisions and not resale property. As airports grow and develop to meet the demand for services created by increased population, the escalating noise and over-flight is seen by airport neighbors as intrusive. Industry continues to develop quieter aircraft; however, the increase in numbers of flights forces shifts in flight paths and noise contours making Airport Influence Areas fluid while zoning and disclosure remains fixed. In time, failure to adequately preserve compatible land use near airports places demand upon the FAA and the State Aviation fund for property acquisition and noise mitigation.

The situation is complicated further by the cross-jurisdictional element that is almost always present in airport planning. An airport located in one community creates noise and over-flights in adjacent cities, towns or counties. Developers working with one political subdivision are unaware of the desires of adjacent land owners. There is a need to create as much certainty as possible, to obligate airport owners to define and publish their needs early, and to share in the general plan process for neighboring political subdivisions.

Tucson Airport Authority leads the way in initiating models for land use plans and maintaining successful relationships with cities, towns, county authorities, and the State Land Department. The Authority always reviews and actively comments on applications for zoning changes within its planning area and aggressively pursues land acquisition to preserve compatible use near Tucson International Airport and Ryan Airfield. Staff persons are always present at meetings of cities and counties. As an independent airport authority, airport staff and board members are in position to advocate on behalf of the airport at all times. The Phoenix Aviation Department is also an example of a proactive airport sponsor. There are staff members dedicated to overseeing land use planning, not only for lands within the City, but in adjacent areas where incompatible use and structures could adversely affect airport operations. These are exceptions, however. Resources generated by commercial operations at the State's two premier commercial aviation facilities permit dedicated staff, an aggressive approach to airport preservation, and documented procedures and guidelines for inter-governmental notification and cooperation.

Emerging communities near Phoenix, such as Buckeye, Wickenburg and Coolidge are only beginning to develop their tax base and aeronautical facilities income. More remote rural communities face even more difficult choices about how to spend scarce airport and community resources. It is clear that in order to protect the State of Arizona's investment in her State aviation system, more help at the state level is required.

Recommendations

Aviation Legislation

Aviation legislation to help achieve state oversight of compatible land use planning near airports is recommended by this ACA to strengthen the State's commitment to aviation planning, preservation and development. Good legislation that could serve as a model for Arizona has been crafted by several states. Legislation should:

- Empower the airport owner to protect the airport from non-compatible encroachment and adversarial confrontation with its community;
 - Empower the State of Arizona and its citizens to protect our significant investment in system airports and maximize the airport's economic return; and
 - Protect airports' ability to develop and operate in the safest most efficient environment.
- Publicly owned and operated airports and local zoning officials should pursue adoption of compatible land use code (Re: airport environs zones), which define compatible land uses in the vicinity of an airport. This should include definitions of prohibited uses within the vicinity of an airport and define Airport Hazard District, Noise Contours, and Public Disclosure Zones. When applicable, ADOT-Aeronautics should provide planning assistance;
- ADOT-Aeronautics should receive notification of local zoning changes and requests for permits for tall structures within Airport Influence Areas, Traffic Pattern Airspace, Airport Noise Contours, Airport Hazard Districts, Airport Planning and Overlay Districts for State system airports. Aeronautics may review and provide comment on these changes and permits in coordination with the airport. Notification requirements should be made part of the State grant assurances for receiving state aviation funding;
- All existing and future airport studies and master plans funded through federal and state grants should be fully integrated into each community's comprehensive general plan to create certainty about airport land use requirements for land owners, developers and prospective purchasers; and
- ADOT Aeronautics will provide assistance to help bridge the gap between airport master planning and compatible land use planning for public use airports.

The Growing Smarter Acts

Growing Smarter and Growing Smarter Plus create a valuable framework for Arizona communities by mandating local jurisdictions and give greater thought to how and where growth will occur and how it will be financed. Guiding principles direct state and local

decision makers to embrace their responsibility, transcend immediate interests, and seek the broadest possible community benefit. The Growing Smarter Acts encourage regional partnerships and collaboration to form a consensus community vision, and promote the use of state laws, procedures, expertise, resources and actions to reinforce local planning efforts. The Guiding Principles and recommended partnerships in each of the six categories set forth by the Growing Smarter Oversight Council; and responsibility and accountability, preservation of community character, stewardship, opportunity, and infrastructure; should be applied to aviation planning.

- Close coordination must exist between the ADOT-Aeronautics Division, State Land Department, and State Real Estate Department to map Airport Influence Areas, Airport Noise Contours, Airport Hazard Districts, and Traffic Pattern Airspace requirements for each public use airport, and to make those maps publicly and readily available to developers, airport sponsors, and planners.
- Based upon the Principles of the Growing Smarter Oversight Council, the State of Arizona should provide templates and structures for regional partnerships and inter-governmental coordination to facilitate collaborative efforts among local authorities for consensus land use planning in the vicinity of airports.

*Year Two Report
Governor's Advisory Council On Aviation*

Airport Capacity Committee



Airport Capacity Committee

In 2005 at the request of the Airport Capacity Committee, Aeronautics staff conducted a survey of all 314 FAA recognized landing facilities in Arizona. Only 33% of the facilities responded. In order to obtain a better response rate, Aeronautics staff worked to revise the process in 2006. In addition, the ACA heard presentations from representatives of PAG and MAG, as well as William Gillies of Luke AFB and Operations Department MCAS Yuma. A report by the Aviation Capacity Committee is found in attached Appendix.

Background

This chapter summarizes the work completed by the Airport Capacity Committee. In 2005 and 2006, the Airport Capacity Committee reviewed information from a large number of stakeholders including airports, aviation users, the business community, city and county officials, and the military. The Airport Capacity Committee evaluated the presentations and reached a consensus. In order to address the critical capacity needs in Arizona, the Airport Capacity Committee is recommending capacity projects at twenty-five airports. By 2025, Arizona's aviation growth measured from current 2 million airport operations (take-offs and landings) to an estimated 3.5 million (75% growth) cannot be accommodated by current airport capabilities. Current aviation development/improvement processes for planning, standards, and implementation are characterized as advisory in nature with the Federal Aviation Administration and are dependent on 'relationships' between agencies, communities and political entities. These 'processes, procedures and policies' are not necessarily followed, accomplished, or complied with, e.g., real estate advertising not ensuring an airport 'area of influence' is stated or mapped.

Survey

As part of the process, the Airport Capacity Committee conducted a written survey of Arizona airports. In order to stimulate a higher survey response rate in 2006, the survey process was refined further. In terms of capacity, the survey asked the question, "Does your Master Plan or Airport Layout Plan (ALP) provide for increased airfield capacity (new taxiways, runways, etc.), terminal/hangar capacity (new terminal buildings, gates, etc.), airspace capacity (new FAA equipment, etc.) or ground access capacity (new roadway, etc.)?" Twenty-four of the seventy-three airports (33% of total responses received) stated that they are planning to increase airport capacity as shown in their Airport Master Plan or ALP. There are 321 airports in Arizona, 92 are cited as primary and secondary in the Federal Aviation Administration Airport Facility Directory for the Southwest United States. The significance of the study may lie in the generation of statistical data for use in future development of airports. The study provides an opportunity to review the facts and correct interpretations of airport policies. Survey results are contained in a report by the Aviation Capacity Committee. (See attached Appendix).

Project Recommendations

For the purposes of this report, the recommendations are divided into seven major categories: (1) Pima Association of Governments (PAG) Regional Aviation System Plan (RASP); (2) Maricopa Association of Governments (MAG) RASP; (3) Grand Canyon National Park Airport; (4) Military Concerns; (5) Outlying Airport System Plan; (6) Mobile Aircraft Rescue Fire Fighting (ARFF) training unit; and (7) General. All seven components are integral to the development of an efficient and effective aviation system in Arizona.

Pima Association of Governments Regional Aviation System Plan

As part of the review process, the Airport Capacity Committee evaluated The Pima Association of Governments' (PAG) Regional Aviation System Plan (RASP) for the Tucson Region's airport capacity issues. Eight of the PAG System Airports were found to need additional capacity, either now or within the planning horizon of 2030. Capacity enhancing projects should be undertaken at Tucson International Airport, Ryan Airfield, Marana Northwest Regional, Pinal Airpark, Ajo Municipal, Benson Municipal, La Cholla Airpark and Sells Airport. The following projects are recommended:

- Tucson International Airport: Construct high speed taxiway exits, construct new runway 11R/29L, re-designate existing Runway 11R/24L as a taxiway, install runway seal coating, add adjacent parking, construct additional general aviation aircraft storage, construct fuel storage facility;
- Ryan Airfield: Construct parallel Taxiway C, construct high speed exits on Runway 6L/24R, construct high speed exits on Runway 6R/24L, construct additional aircraft storage, upgrade and lengthen Runway 6R/24L, install Runway 6L/24R pavement preservation;
- Marana Northwest Regional: Construct high speed taxiway exits, construct a parallel Runway 12R/30L, construct full parallel Taxiway D, construct forty T-hangar positions, construct 3,500 square yards of auto parking, install pavement preservation, upgrade the structural runway;
- Pinal Airpark: Construct additional aircraft storage, pavement runway enhancements;
- Ajo Municipal: Construct 4,800 square feet of T-hangars, construct 225 square yards of auto parking, install pavement preservation;
- Benson Municipal: Construct 10 T-hangars, expand auto parking area by 1,800 square yards;
- La Cholla Airpark: Construct additional aircraft storage, overlay Runway 1/19; and
- Sells Airport: Construct additional aircraft storage, pavement runway enhancements.

Maricopa Association of Governments RASP

The Airport Capacity Committee reviewed MAG RASP projects as well. The MAG region needs more air transportation capacity because growth in demand will increase substantially from 2005 until 2025. It is expected that commercial service will increase from 40 to 80 million passengers annually, a 100% increase. General aviation is also expected to grow from 2 million operations to 3.3 million operations, a 65% increase. This growth in demand will require the maximization of existing airports and the development of at least one new airport.

Sixteen of the existing MAG System Airports were found to need additional capacity within the planning horizon of 2025. The following airport projects are recommended:

- Williams Gateway Airport: Expand terminal building, develop parallel runway, construct parallel and exit taxiways, extend Runway 12L-30R, install High Intensity Runway Lights (HIRL), install Medium Intensity Taxiway Lights (MITL) and High Intensity Taxiway Lights (HITL), expand aircraft storage, construct Airport Lighting System (ALS);
- Phoenix Sky Harbor International Airport: Construct new West Terminal, upgrade the Ground Transportation System, continue taxiway improvements from asphalt to concrete, extend South Runway 7R/25L, build new fourth runway, install Medium Intensity Taxiway Lights (MITL) and High Intensity Taxiway Lights (HITL), install Medium Intensity Approach Lighting System (MALS) for precision approach capability, install Medium Intensity Runway Lights (MIRL) and High Intensity Runway Lights (HIRL), construct parallel and exit taxiway, expand vehicular parking, continue environmental mitigation projects;
- Scottsdale Airport: Install Medium Intensity Approach Lighting System (MALS) for precision approach capability, add more terminal building space, expand aircraft storage;
- Phoenix-Deer Valley Airport: Install Medium Intensity Taxiway Lights (MITL) and High Intensity Taxiway Lights (HITL), install Medium Intensity Approach Lighting System (MALS) for precision approach capability, install Medium Intensity Runway Lights (MIRL) and High Intensity Runway Lights (HIRL), expand aircraft storage, construct parallel taxiway;
- Phoenix-Goodyear Airport: Build a new parallel runway, install Medium Intensity Runway Lights (MIRL) and High Intensity Runway Lights (HIRL), construct parallel taxiway, install Medium Intensity Taxiway Lights (MITL) and High Intensity Taxiway Lights (HITL), install Medium Intensity Approach Lighting System (MALS) for precision approach capability, expand aircraft storage;
- Buckeye Municipal Airport: Widen and extend runway, extend parallel taxiways, install Medium Intensity Taxiway Lights (MITL) and High Intensity Taxiway Lights (HITL), install Medium Intensity Approach Lighting System (MALS) for precision approach capability, install Medium Intensity Runway Lights (MIRL) and High Intensity Runway Lights (HIRL), expand aircraft storage;
- Sky Ranch Carefree Airport: Install Precision Approach Path Indicator (PAPI) runway lights, widen runway, and expand aircraft storage;
- Chandler Municipal Airport: Widen and extend runway, install Medium Intensity Taxiway Lights (MITL) and High Intensity Taxiway Lights (HITL), install Medium Intensity Approach Lighting System (MALS) for precision approach capability, install Medium Intensity Runway Lights (MIRL) and High Intensity Runway Lights (HIRL), extend parallel taxiways, expand aircraft storage;
- Estrella Sailport Airport: Install Visual Approach Path Indicator (VASI) runway lights, Precision Approach Path Indicator (PAPI) runway lights;

- Gila Bend Municipal Airport: Extend parallel taxiways, increase pavement strength, install Medium Intensity Taxiway Lights (MITL), install Precision Approach Path Indicator (PAPI) runway lights, install Runway End Identifier Lights (REIL);
- Glendale Municipal Airport: Build parallel taxiway on the east side, extend parallel taxiway on the west side, install Medium Intensity Approach Lighting System (MALs) for precision approach capability, install Medium Intensity Runway Lights (MIRL) and High Intensity Runway Lights (HIRL), expand aircraft storage;
- Mesa Falcon Field Airport: Implement curved precision approaches by installing Medium Intensity Approach Lighting System (MALs), construct exit taxiway, install Medium Intensity Taxiway Lights (MITL) and High Intensity Taxiway Lights (HITL), expand aircraft storage;
- Wickenburg Municipal Airport: Develop non-precision approach capability, expand aircraft storage;
- Pleasant Valley Airport: Pave runway, install Medium Intensity Taxiway Lights (MITL) and High Intensity Taxiway Lights (HITL), install Medium Intensity Runway Lights (MIRL) and High Intensity Runway Lights (HIRL), construct parallel taxiway, develop non-precision approach capability, expand aircraft storage, install Precision Approach Path Indicator (PAPI) runway lights, install Runway End Identifier Lights (REIL);
- Stellar Airpark: Expand aircraft storage; and
- New General Aviation Airport: Acquire land, pave runway, install Medium Intensity Runway Lights (MIRL) and High Intensity Runway Lights (HIRL), construct parallel taxiway, install Medium Intensity Taxiway Lights (MITL) and High Intensity Taxiway Lights (HITL), install Precision Approach Path Indicator (PAPI) runway lights, install Runway End Identifier Lights (REIL), install Medium Intensity Approach Lighting System (MALs) for precision approach capability, construct Fixed Base Operator, install fueling services, construct parking facilities, build access and utilities on the site, construct aircraft storage. Possible locations include Peoria/Pleasant Valley, Wickenburg/Forepaugh, south/southeast search area south of Chandler, or northeast of Scottsdale.

Grand Canyon National Park Airport

The Airport Capacity Committee reviewed the status of Grand Canyon National Park Airport as well. The Grand Canyon National Park Airport, the front door to Arizona, is an under-funded, under-staffed and developmentally impaired airport. Grand Canyon National Park Airport is the third busiest airport in Arizona behind Phoenix Sky Harbor International Airport and Tucson International Airport. The operating budget for Grand Canyon National Park Airport is appropriated from the State of Arizona's Aviation Fund. When Grand Canyon National Park Airport's operating revenues exceed operating expenses, the excess revenues are deposited into the State of Arizona's Aviation Fund.



The Airport Capacity Committee compared the Grand Canyon National Park Airport's operating budget and staffing level to 35 airports for fiscal year 2006. Grand Canyon National Park Airport ranks last in both categories - 36th with the lowest operating budget of only \$1 million versus \$3 million and only 14 versus 22 full-time employees at comparable airports.

Although the Grand Canyon National Park Airport currently receives appropriations from the State of Arizona's Aviation Fund, the Airport Capacity Committee recommends that this approach be changed to an enterprise fund. An operating fund receives its budget through the annual appropriations process from the collection of taxes. An enterprise fund, on the other hand, does not receive any revenue from the general fund. An enterprise fund is self-supporting through the collection of user fees and other airport generated revenues. An enterprise fund only pays for costs associated with enterprise fund-related activities.

Military

The military is also an important component of the aviation system. The mission of military airspace in Arizona is to support the training of members of the Army, Navy, Marines and Air Force to meet our country's worldwide combat commitment. The military airspace program was established to designate airspace in the interest of National Defense, security and welfare. In order to ensure the successful completion of the military's objectives, military airspace needs to be protected.

Military airspace can be divided into the categories below:

1. **Restricted Airspace:** This airspace is designated under 14 Code of Federal Regulations under Part 73, where the flight of civil aircraft is not wholly prohibited, but is subject to some restrictions;
2. **Military Operating Area (MOA):** This airspace is established to segregate certain non-hazardous flight activities from Instrument Flight Rule traffic and to identify to Visual Flight Rule traffic;
3. **Air Traffic Controlled Assigned Airspace (ATCAA):** This airspace is above FL 180 and is attached to MOA airspace controlled by the FAA to support the military mission;
4. **Military Training Routes (MTRs):** This airspace is composed of routes used by the Department of Defense for the purpose of conducting low-altitude navigation and tactical training at airspeeds in excess of 250 KIAS below 10,000 ft Mean Sea Level;

5. Low Altitude Tactical Navigation Area (LATN): This airspace is characterized by random low altitude navigation under Visual Flight Rule conditions when flights are flown at 250 KIAS; and
6. Air Refueling: This airspace is used to conduct air refueling by using tracks and anchors above FL 180 or lower in MOAs/restricted areas for low-level helicopter/C-130s.

The table below lists military facilities in Arizona that need to be protected from encroachment.

<u>Military Facility</u>	<u>Location</u>	<u>Mission</u>
Barry M. Goldwater Range	Approximately 50 nautical miles southwest of Luke	A National Range asset that provides the military bases in Arizona, the United States and Allied countries a required air to air, air to ground and realistic live drop range environment
Marine Corps Air Station Yuma	Approximately 5 square miles just southeast of Yuma	To support 80% of the Marine Corps' aviation training
Luke Air Force Base	Approximately 20 miles west of Phoenix on 4,198 acres	To train U.S. and Allied F-16 aircraft pilots and crew chiefs, (and anticipated F-35/Joint Strike Fighter aircraft)
Fort Huachuca	In southern Arizona near Sierra Vista	To train and test Unmanned Aerial Vehicles for the U.S. Army and other Federal Defense agencies, and to provide instrument approach training for D-M, Tucson Guard and 161 ARW pilots
Yuma Proving Grounds	10 restricted airspace areas located between Yuma and Quartzsite along the Colorado river	To support the Army's test and training mission of artillery, direct fire and other combat related equipment
Davis-Monthan Air Force Base	Southeast section of the City of Tucson, North of Tucson International Airport on 10,618 acres.	To train A-10 pilots and support expeditionary, combat and combat support forces, Homeland Security forces and EC-130 aircraft operations
Sunny	Located 70 nautical miles northeast of Luke	To operate as a holding area for Large Force Exercises, intercept training, and a refueling anchor
Sells	Located approximately 40 miles south of Luke between Tucson and Ajo	To conduct training
Tombstone	Located 50 miles southeast of Davis-Monthan Air Force Base	To support Davis-Monthan A-10 and U.S. Air Force F-16 training
Outlaw/Jackal	Located 60 nautical miles northeast of Tucson and 30 miles east of Phoenix	To provide air-to-air training, intercept training, air combat tactic training, and night vision training missions
Ruby/Fuzzy	Located 30 nautical miles southwest of Tucson	To conduct basic flight maneuver training, air combat tactic training, intercept training, formation training
Reserve/Morenci	Located 75 nautical miles northeast of Tucson	To train basic flight maneuvers, air combat tactics, intercept missions

Outlying Airport System Plan

Another suggestion is to develop an Outlying Airport System Plan for airports who are not in MAG RASP or PAG RASP. It is desirable to make sure that small airports in the outlying communities are represented in an Airport System Plan.

Mobile Aircraft Rescue Fire Fighting Training Unit

The Airport Capacity Committee reviewed information on Aircraft Rescue Fire Fighting (ARFF) training. Training for firefighters is critical because studies show 80% of passengers do survive the initial impact. Most fatalities in an airplane crash are due to smoke inhalation or burns, not the initial trauma of the crash. These fatality numbers can be reduced by a quick, well-trained ARFF response. Although airports such as Phoenix Sky Harbor International Airport and Tucson International Airport participate in regional Federal Aviation Administration (FAA) Part 139 Training with annual live burns, small airports in Arizona cannot afford to send their firefighters for this type of regional FAA training. Since there is a need to make ARFF training affordable for small airports in rural parts of Arizona, the Airport Capacity Committee suggests that the Arizona Department of Transportation explore the possibility of funding a mobile statewide ARFF training unit. This facility would provide important fire safety training for communities who are unable to afford national training.

General

General aviation airports are an untapped resource and are a major part of our integrated transportation system. General aviation provides 70% of the airport system in the United States. Consequently, most manufacturers locate their physical organization within ten miles of an airport. The Airport Capacity Committee recommends the state increase the annual Pavement Maintenance Management Program funding from \$3 million to \$4 million and increase the scope of projects covered, establish an Adopt-An-Airport program, and create a statewide program for the inspection and maintenance of airports who have automated weather observation systems (AWOS). An Adopt-An-Airport program can be accomplished through a volunteer partnership effort. The volunteers assist airport managers in maintaining and beautifying local Arizona airports. Arizona's airports are valuable community assets, and the time and effort invested in them will result in a positive economic impact for the community and the entire state. Adopt-An-Airport is a prime example of public/private partnership at work. Volunteers are matched with airports in the need of routine repair. An AWOS is also very important to the aviation industry because it collects weather data at airports and disseminates the weather information via radio and/or landline.

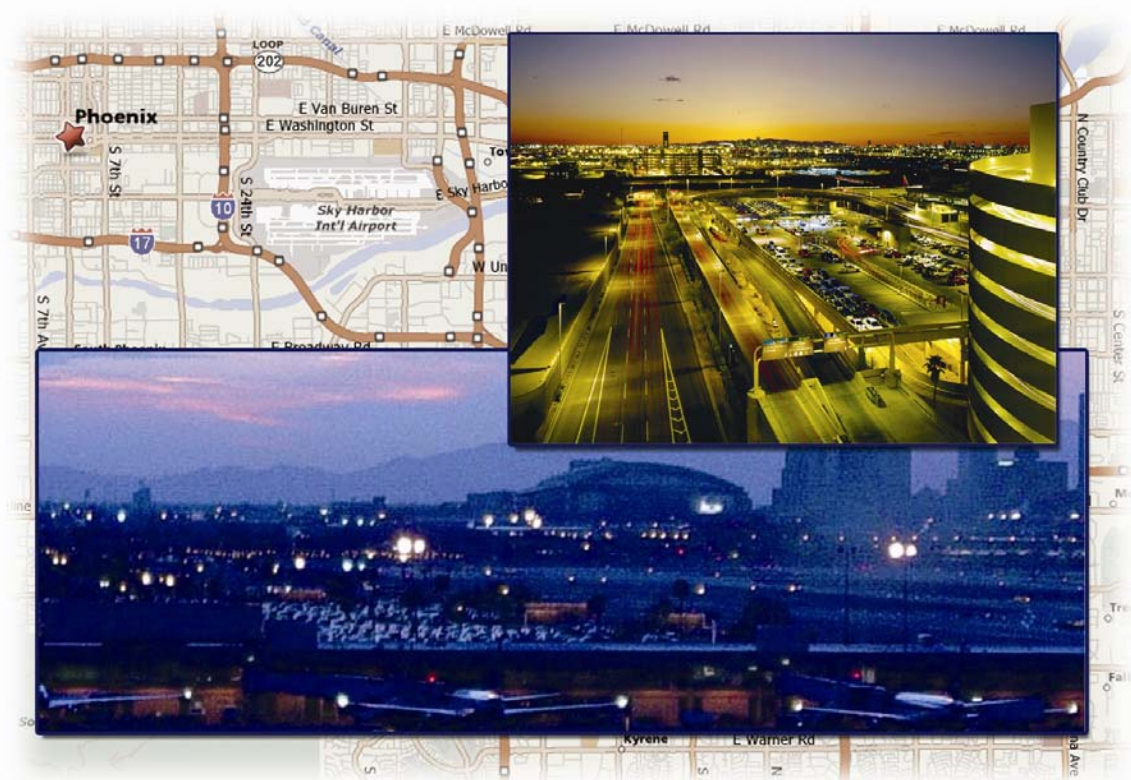
Conclusion

The Airport Capacity Committee recommended the following:

- Fund and implement capacity projects at twenty-five airports in Arizona;
- Change Grand Canyon National Park Airport's funding approach from the State of Arizona's Aviation Fund to an enterprise fund. Rates and charges should be adjusted appropriately to allow for revenues to cover sufficient staffing levels and a capital improvement program;
- Protect the military's need for Arizona airspace;
- Develop an Outlying Airport System Plan for small airports in outlying communities;
- Explore the possibility of funding a mobile statewide ARFF training unit to provide important fire safety training for communities who are unable to afford national training;
- Increase the annual Pavement Maintenance Management Program funding from \$3 million to \$4 million and increase the scope of projects covered;
- Establish an Adopt-An-Airport program; and
- Create a statewide program for the inspection and maintenance of airports that have automated weather observation systems (AWOS).

*Year Two Report
Governor's Advisory Council On Aviation*

Finance Committee



Funding for Airports

Federal

The Arizona Department Of Transportation-Aeronautics Division (ADOT-Aeronautics) made a presentation about federal funding opportunities for airports. A sample list of grants potentially available to airports is contained in attached Appendix.

The Airport Improvement Program (AIP-20.106) provides the largest amount of money annually to both primary commercial and general aviation/reliever airports. The AIP program collects fees and taxes from aviation users through a gas tax, airline ticket tax, and excise tax on selected aviation parts and supplies. These monies are deposited into the Aviation Trust Fund and appropriated by Congress for grant distribution to airports for the further development of the nation's airport infrastructure. Funds are distributed by formula each year to specific airports or types of airports, and are broken down into four funding categories (apportionments, small airport fund, discretionary fund and set asides). Projects funded under the AIP program must meet eligibility and priority ranking requirements.

Portions of the collected funds are used to pay for administrative needs of the FAA and the operation of the air traffic control system. Over the past several years, Congress has allocated an increasing portion of the funds to this operating expense, resulting in fewer dollars available for AIP projects. The ACA believes AIP funding is a critical element in Arizona's aviation future and every effort should be made to stem the erosion of AIP funding by FAA operating expenses.

The federal legislation authorizing the FAA and AIP funding expires in 2007. Decreases to the authorized AIP grant funding levels could have a devastating effect upon all public use aviation facilities in Arizona. The ACA urges Arizona's Congressional delegation, the United States Department of Transportation, the Federal Aviation Administration, the Arizona Department of Transportation, and the Arizona Department of Transportation-Aeronautics Division to do all they can to protect the integrity of the Aviation Trust Fund and its AIP funding for airports.

In recent years, several new sources of federal funding for airport projects have been established. These include the development of the Passenger Facility Charge (PFC) Program, which allows commercial service airports that have applied and been approved by the FAA to collect up to \$4.50 in additional fees from passengers. These funds are available to the specific airport collecting the fees, and are administered in a manner similar to the standards used to define AIP project eligibility. Upon implementation of a PFC at an airport, the airport's share of its apportionments under the AIP program will be reduced by 50% to 75%, dependent upon the PFC charge approved by the FAA.

Homeland Security and Firefighter Association grants, along with TSA reimbursement funds, are now also available to provide small amounts of money for specific, security-related eligible projects.

State

The State of Arizona also has a program for collecting aviation fuel taxes, flight property taxes, in-lieu-of taxes, and aircraft registration fees. Additional income for the State Aviation Fund comes from the operation of Grand Canyon National Park Airport, interest from the airport loan program, and interest on the fund balance. These dollars are available to both commercial and publicly owned and operated general aviation airports in the State for airport improvement projects similar to those eligible for federal AIP funding. In addition, the State has implemented an airport pavement maintenance service program that addresses airfield pavement maintenance for eligible and participating airports. This is an important source of funding for critical pavement preservation at many of the State's airports. Funds are administered by the ADOT-Aeronautics Division and allocated based on a priority ranking system. In addition, these funds are intended to supplement the federal allocations. The State funds are particularly crucial to the smaller non-commercial publicly owned and operated airports in the State.

Historically, there has not been sufficient funding available to meet the growing demand among the State's airports for necessary infrastructure improvements. The insufficient funding problem was compounded by the State Legislature's diversion of 50% of the Flight Property Tax revenue from the State Aviation Fund and into the General Fund in 1997. The argument in favor of this diversion was to provide funding to the State for technology enhancements in preparation for Y2K. This diversion was precipitated by what appeared to be a large balance in the Aviation Fund. Funds were diverted without consideration of the State's obligations. The diversion continued beyond 2000. The aviation community worked together through the Arizona Airports Association (AzAA) for several years to encourage an end to the diversion of flight property tax revenue from the State Aviation Fund. The Governor and Legislature ended the diversion and reinstated the full flight property tax revenue in 2003. The format of existing statutory language easily gives rise to diversions from the Aviation Fund. The aviation community remains concerned that this situation could reoccur in the future. (See ADOT-Aeronautics Director's June 28, 2006 Presentation to ACA in attached Appendix).

The ACA strongly recommends the Aviation Fund be legislatively or constitutionally protected.

Funding Recommendations

The aviation community continues to be concerned that insufficient funds are available to maintain and improve the State's network of airports. Critical projects that are under-funded due to limitations of available dollars will ultimately become a financial burden to airports, their communities and their tenants. If adequate funding is not provided to ensure the State's aviation system keeps up with the rapid growth of Arizona's

population and aviation community, it will have a significant adverse effect on the economic prosperity of the State. The ACA has worked closely with the State's aviation community to develop specific recommendations to the Governor to maximize the effectiveness of the limited available funding. To effect that maximization, the ACA recognizes and recommends:

- AIP funding is a critical element in Arizona's aviation future and every effort should be made to stem the erosion of AIP funding by FAA operating expenses. The ACA urges Arizona's Congressional delegation, the United States Department of Transportation, the Federal Aviation Administration, the Arizona Department of Transportation, and the Arizona Department of Transportation Aeronautics Division to do all they can to protect the integrity of the Aviation Trust Fund and its AIP funding for airports;
- Arizona should strengthen its commitment to the State Aviation System through modification in legislation to constitutionally or statutorily protect the State Aviation Fund and eliminate the potential for future diversion of aviation funding sources from the State's Aviation Fund to non-aviation purposes;
- All revenue collected from the aviation sector be dedicated for aviation purposes;
- Request the Legislature appropriate to the Aviation Fund the full amount of the anticipated Fund revenues each year and re-appropriate to the Fund any unspent funds from the previous year;
- Development of an enhanced Joint Planning Conference process by the ADOT-Aeronautics Division, the FAA and airports to maximize the use of available federal and state grant funds toward the airport's improvement priorities. Enhancing communication and synchronizing the timing of the FAA and ADOT planning processes, along with greater input from airports on their most critical priorities, will ensure the most realistic and achievable ACIP to fund aviation infrastructure priorities;
- ADOT-Aeronautics should work with the State Financial Division to establish an accounting system, similar to the State Highway Fund, wherein obligated and encumbered funds are "deducted" from the available balance in the Fund. This system would show the true status of the Aviation Fund so that the Legislative body can see the actual remaining fund balance after encumbrances and obligations are removed, not the fund balance as a whole;
- ADOT-Aeronautics Division should continue to issue design-only grants for airports that will help speed up the process for getting projects ready to go based-on-bids. This would help increase the amount of federal dollars coming into the state as the FAA's performance is based on granting dollars based-on-bids;

- ADOT-Aeronautics Division should look at ways to increase appropriations from the State Aviation Fund for use in grant and loan funding programs for airports;
- Amend State Aviation Fund statutory language limiting the amount of grant funds for an airport from ten percent of the total aviation fund to ten percent of the fund forecast annual revenue;
- ADOT-Aeronautics Division should review administrative directives and develop criteria with stakeholders to address the allocation of funds and the current requirements for an airport's matching funds; and
- Grand Canyon National Park Airport should be operated as an enterprise fund of the State of Arizona. It is the gateway airport to one of Arizona's, and indeed the world's, most unique treasures. Financial management as an enterprise fund would permit the airport to be managed and operated using exclusively airport-generated funds. Airport rates and charges would be negotiated with tenants at levels that permit much needed capital improvements and long range set asides to showcase the airport and enhance its economic contribution to the State.

Conclusion

In order for operators of the State's aviation system to meet increasing demands for aviation growth pursuant to the Governor's Growth Initiative, it is imperative for airports to grow compatibly with the surrounding communities, prepare capital improvement programs, and fund additional development. The information and recommendations included in this report encourage on-going discussion and enactment of legislation and administrative solutions by the appropriate parties to help them effectively manage these aviation growth challenges.

Acknowledgements

The Governor's Advisory Council on Aviation wishes to express our appreciation to the Governor for the privilege of providing input and recommendations to the Governor, the President of the Senate, the Speaker of the House and the State Transportation Board. We appreciate the opportunity to have worked with aviation representatives and stakeholders over the two-year time frame to develop consensus findings and recommendations to improve aviation in Arizona.

A special note of appreciation goes to the members of the committees who gave a significant amount of their time to research, discuss, and write the chapters included in this report.

Land Use Planning

Stacy Howard
Robert Littlefield

Capacity

David Kreitor
Barbara Harper

Funding

Bonnie Allin
Stacy Howard
Mike Covalt